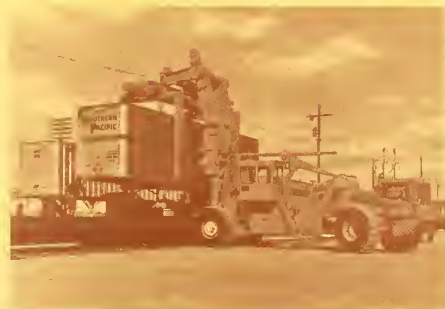


# Report on Rail and Marine Interface at the Port of Jacksonville



U.S. DEPARTMENT OF COMMERCE Maritime Administration





# Report on Rail and Marine Interface at the Port of Jacksonville



U.S. DEPARTMENT OF COMMERCE  
ROGERS C. B. MORTON, SECRETARY

James A. Baker, III  
Under Secretary

Maritime Administration,  
Robert J. Blackwell,  
Assistant Secretary for  
Maritime Affairs

Prepared by  
Office of Port and  
Intermodal Development  
Maritime Administration, Eastern Region

August 1975

For sale by the Superintendent of Documents,  
U.S. Government Printing Office,  
Washington, D.C. 20402.  
Price 45 cents.



## TABLE OF CONTENTS

<u>TITLE</u>	<u>PAGE</u>
INTRODUCTION	1
JACKSONVILLE RAIL/MARINE TERMINALS	2
RAILROAD TERMINAL SURVEY	3
Southern Railway	4
Seaboard Coast Line Railroad	5
Florida East Coast Railroad	6
MARINE TERMINAL SURVEY	7
Talleyrand Docks and Terminals	7
Blount Island Terminal	9
Sea-Land Service Terminal	12
Eighth Street Terminal	12
McGiffin Terminals	13
TMT Trailer Ferry Terminal	13
Commodores Point Terminal	13
Gulf and Caribbean Wharf	14
RAIL/MARINE INTERCHANGE ANALYSIS	15
CONCLUSION	18

## FOREWORD

The Maritime Administration, through the programs of the Office of Port and Intermodal Development, is fostering the continued growth of intermodalism within the American Merchant Marine. It is recognized that the interface of marine terminal operations with those of the rail carriers is a key to improving the effectiveness of the intermodal transport system. Reducing the cost, time, and distance factors involved in the interface between U. S. - flag carriers and inland modes can contribute to the efficiency and economy of intermodal transport, and thereby further enhance the competitiveness of the American Merchant Marine.

It is hoped that these reports will shed helpful light on the nature, procedures, and problems of container interchange, and will contribute toward the eventual refinement of this operation interface.

The Office of Port and Intermodal Development and the Eastern Region Office welcome inquiries regarding these reports and other ongoing efforts of the Maritime Administration in the field of commercial development and the promotion of the American Merchant Marine.



## INTRODUCTION

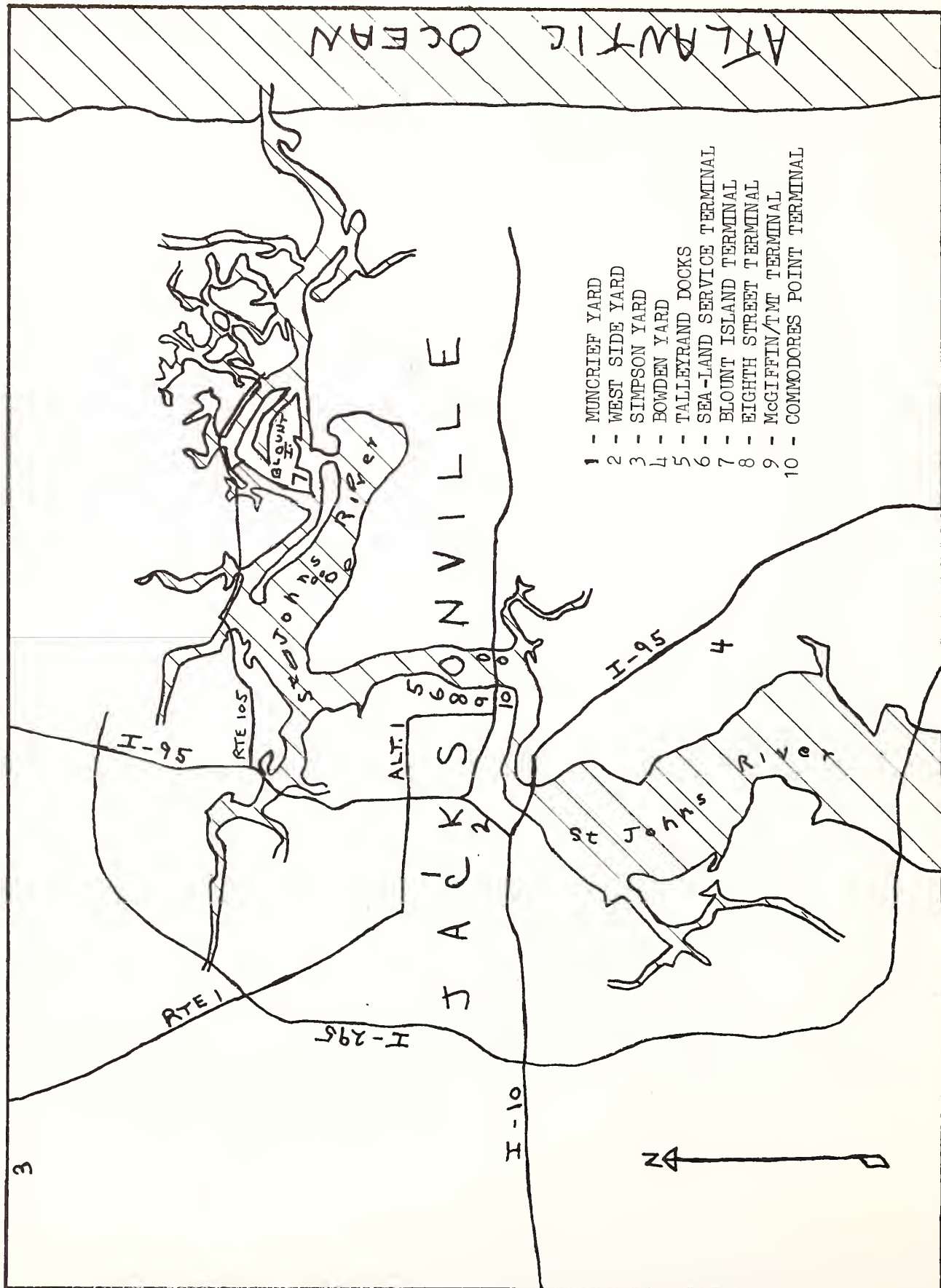
Jacksonville, Fla. is the most recent major U. S. port to be surveyed in a series of studies examining the rail terminal/marine terminal interchange of intermodal equipment. The Jacksonville study, as did its predecessors, focuses mainly on the intermodal operations of U. S. - flag steamship operators. All port rail and marine terminal facilities which handle intermodal equipment are discussed however, whether utilized by either U. S. or foreign flag ocean carriers.

The port of Jacksonville is situated in the northeast corner of Florida, approximately 24 miles up the St. Johns River. Waterfront facilities of one type or another are situated on both banks of the river between its mouth and the port itself. Two east-west jetties extend across the ocean bar from the river's mouth, and mark the port's deepwater channel entrance from the sea. The channel is 38 feet in depth, and varies in width from 400 to 1,200 feet between the jetties and a point approximately 15 miles upriver. The depth then decreases to 34 feet for approximately 7 miles and finally to 30 feet through the downtown area.

The port is the largest in the southeastern United States and registered over 15 million tons of waterborne commerce in 1974. An extensive port development program sponsored by the Jacksonville Port Authority has been underway for several years, and the results are evident in most port operations dealing with waterborne commerce. Continued forward looking planning and development insure Jacksonville's status as an efficient, modern, and highly competitive national seaport.

A major part of the development accomplished thus far has been in the area of intermodalism, specifically containerization. Almost 8,000 marine containers pass through the port's three container handling facilities each month, a volume which is steadily on the rise. Of the 15 million tons of waterborne commerce which moved through Jacksonville in 1974, between 8 and 9 percent was containerized. The importance of the container to port operations and the soundness of the decision to construct modern container terminals to handle them are emphasized by this impressive volume of containerized cargo movements.

The waterborne commerce moving via Jacksonville is greatly enhanced by the number of water and land carriers serving the port. Nearly 175 water carriers maintain either an office or agency in the port, although the actual frequency of vessel calls and types of services offered by most are limited. On the land side, three dozen major motor carriers and three trunk line railroads give Jacksonville quality access to the entire continental United States.



- 1 - MUNCRIEF YARD
- 2 - WEST SIDE YARD
- 3 - SIMPSON YARD
- 4 - BOWDEN YARD
- 5 - TALLEYRAND DOCKS
- 6 - SEA-LAND SERVICE TERMINAL
- 7 - BLOUNT ISLAND TERMINAL
- 8 - EIGHTH STREET TERMINAL
- 9 - MCGIFFIN/TMT TERMINAL
- 10 - COMMODORES POINT TERMINAL



## RAILROAD TERMINAL SURVEY

Major trunk line railroads serving the Jacksonville port area are:

1. Southern Railway System
2. Seaboard Coast Line Railroad
3. Florida East Coast Railway

They are supplemented by the Municipal Docks Railway, a switching service which operates primarily in the Talleyrand Docks and Blount Island areas. Negotiations have been consummated for the long term lease of this switching operation to the Seaboard Coast Line Railroad.

The services, practices, and facilities of each trunk line railroad were examined as they relate to railroad piggyback traffic, whether it be domestic trailers or marine containers. Relative volume percentages for these two categories of piggyback traffic on the three trunk line railroads are as follows:

	<u>Marine Container</u>	<u>Domestic Traffic</u>
Southern	5%	95%
Seaboard Coast Line	10%	90%
Florida East Coast	20-25%	75-80%

The total amount of marine container rail traffic represented by the above percentages accounts for approximately 25 percent of all marine container traffic through the port, the balance moving via motor carrier.

Reference should be made to the chart of Jacksonville for relative locations of the various railyards discussed.

## SOUTHERN RAILWAY

The Southern Railway System provides Jacksonville with thorough rail access to all of the Southeast, as far west as Memphis and St. Louis, and as far north as Cincinnati and Washington, D.C. Jacksonville lies on the southernmost perimeter of service, since Southern Railway trackage does not extend into central and south Florida. Simpson Yard, Southern's terminal in Jacksonville, is located approximately 15 miles northwest of the downtown area. Four trains arrive each day, all with piggyback capacity. Three originate in Atlanta and one in Birmingham. Four reciprocal departures take place daily, each also having piggyback capacity. There are naturally many intermediate locations inland where railcar units are picked up or dropped off enroute.

Simpson Yard has both container on flatcar (COFC) and trailer on flatcar (TOFC) piggyback handling capability. One track is maintained for such traffic and has a twenty-five 89 foot long TTX or TTAX railcar capacity. This track is serviced by two rail mounted transtainers for handling trailer or container units on or off the railcars. A fleet of yard commandos is maintained for trailer shuttling purposes around the yard itself.

No marine terminals within the port have been designated as "ramp points" by the Southern Railroad. Transfer services are offered to these terminals at published tariff rates however, and are accomplished through drayage since Southern trackage does not extend to any marine terminal directly.

## SEABOARD COAST LINE RAILROAD

The Seaboard Coast Line Railroad, in conjunction with two wholly owned subsidiaries, the Louisville and Nashville and the Monon railroads offers Jacksonville extensive rail coverage throughout the Southeast. Its western and northern service perimeters are lined by the cities of New Orleans, Memphis, St. Louis, Cincinnati, Chicago, and Norfolk.

The present railroad organization is the result of a 1967 merger between the Atlantic Coast Line Railroad and the Seaboard Air Line Railroad and both original rail terminals are presently operated in Jacksonville.

Muncrief Yard, the former terminal of Atlantic Coast Line, is located about two and one-half miles northwest of the downtown area. It receives four trains daily from such diverse origins as Atlanta, Richmond, and Charlotte. The same number of trains also is dispatched daily for reciprocal inland destinations. All daily arrivals and departures have piggyback traffic capability. Muncrief Yard has trailer on flat car (TOFC) handling capability only. This is provided by seven ramps, each with a working capacity of 10 to 12 railcars.

West Side Yard, the former terminal of the Seaboard Air Line, is in the same general locale as Muncrief Yard, but is only slightly over one mile northwest of the downtown area. Two piggyback trains are received daily and a like number dispatched, one of which is destined ultimately for Kearney, N.J. via connecting carriers. The yard handles both COFC and TOFC traffic. Four ramps, each with a railcar capacity of 10 to 12 units, a piggypacker type crane, and a number of yard commandos make up the yard's inventory of container and trailer handling equipment.

Piggyback train arrivals and departures form the basic nucleus of traffic for both yards. Numerous other smaller trains arrive and depart regularly, and generally contain limited piggy back capability.

Seaboard Coast Line has designated Blount Island Container Terminal as a "ramp point" and offers direct rail service there. Container transfer from both rail yards to the municipal piers in the downtown area is accomplished by drayage.

## FLORIDA EAST COAST RAILWAY

The trackage system of the Florida East Coast Railway completes Jacksonville's rail access to the state of Florida. The seaport serves as the northern terminus of the railroad, whose service extends southward, paralleling the Atlantic Ocean coast of Florida to just south of Miami.

Bowden Yard, the Jacksonville rail terminal of Florida East Coast, is situated about five miles southeast of the downtown area. Seven trains, generally all of which carry piggyback traffic, arrive daily in Jacksonville. Five of these arrivals originate in Miami, one in West Palm Beach, and one in Fort Lauderdale. Seven Jacksonville daily departures also occur each day on routes reciprocal to those of the arrivals.

Both TOFC and COFC capability exists at Bowden Yard. TOFC traffic is handled by a six track network served by two ramps. Five of the tracks have an eight to 10 flatcar capacity while the sixth has a 12 car capacity. An additional 30 flatcar capacity track is also maintained for either COFC or TOFC traffic, and is serviced by a piggypacker crane. Commando tractors are operated for unit maneuverability around the railyard.

The marine container transfer method utilized by Florida East Coast Railway is for all practical purposes exclusively drayage. Blount Island terminal has been designated as a "ramp point" and direct container transfer service is offered between the rail terminal and that marine facility. The Municipal Piers and other marine terminals in the downtown area are not "ramp points" and require additional transfer arrangements by the shipper or consignee.

## MARINE TERMINAL SURVEY

The St. John's River, between the point where it passes through downtown Jacksonville and its mouth 24 miles downstream, is the site of 43 different marine terminals. Types of industries served by these terminals range from petroleum, chemical, and paper to public utilities, ship-building and stevedoring.

For purposes of this report, the survey of marine terminals covers those facilities serving mainly berth line operators and offering general cargo and/or container handling capability. Some specialized facilities of interest have also been included for the sake of information. The terminals surveyed may be categorized into one of the following groups:

1. Jacksonville Port Authority owned and publicly operated terminals.
2. Leased Terminal facilities on Port Authority owned property.
3. Privately owned and operated terminals.

Each category will be considered individually and respective marine terminals will be discussed regarding:

1. Geographical location
2. Owner, operator, tenant information
3. Highway access
4. Railroad access
5. Facility description
6. Traffic volume

All of the marine terminals discussed are in the proximate vicinity of the downtown Jacksonville area except Blount Island, which is situated 17 miles downstream.

Reference should be made to the chart of the port area in the introduction, which indicates the relative positions of rail and marine terminals within the port area.

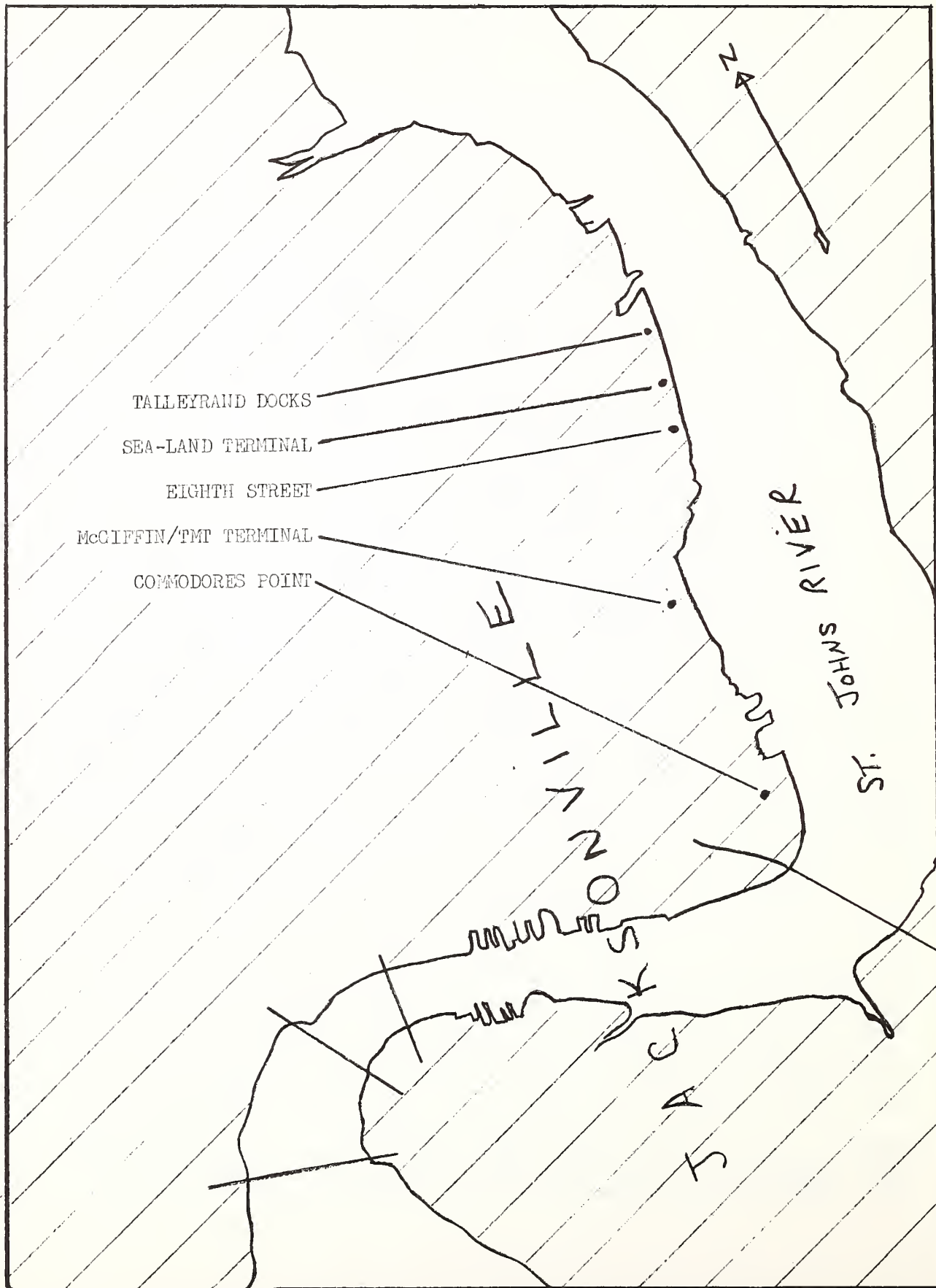
### 1) JACKSONVILLE PORT AUTHORITY OWNED AND PUBLICLY OPERATED TERMINALS

#### Talleyrand Docks and Terminals

Talleyrand Docks and Terminals is located approximately three miles in an easterly direction from the downtown area. It is basically a general cargo facility with container and vehicle capability that is utilized to a great degree. Among this public terminal's primary tenants are included such major ocean carriers as Moore-McCormack Lines, Farrell Lines, Combi Line, Argentine Lines, Lloyd Brasileiro, Ivaran Lines, and Netumar Lines.

Route U. S. Alt. 1 passes about three quarters of a mile away from Talleyrand Terminal, and interconnects with Interstate 95 two miles beyond. This categorizes the terminal's vehicular access as excellent. Direct







rail service is available from all three major trunk lines serving the port through the switching services of the Municipal Docks Railway. As mentioned in the railroad terminal survey, direct container on flatcar and trailer on flatcar service is not available at this time.

Vessel berthing space at Talleyrand is along a 2,400 foot marginal wharf in 34 feet of water, supplemented by an additional 300 foot pier berth. Five transit sheds are available, two of which have 160,000 square feet of floor area each, and a third which has 126,000 square feet. Although the terminal has no permanent crane, a 50 ton rail mounted revolving gantry unit will soon be transferred from Blount Island Terminal upon the completed erection of a new crane at that facility. Forty forklift trucks, ten clamp trucks, two self-propelled railcar automobile loading ramps, as well as other varied gear make up the inventory of the terminal's cargo handling equipment. The largest piece of gear available presently is a 46,000 pound lift truck. Contract stevedores supply comando tractors for the yard handling of containers where applicable.

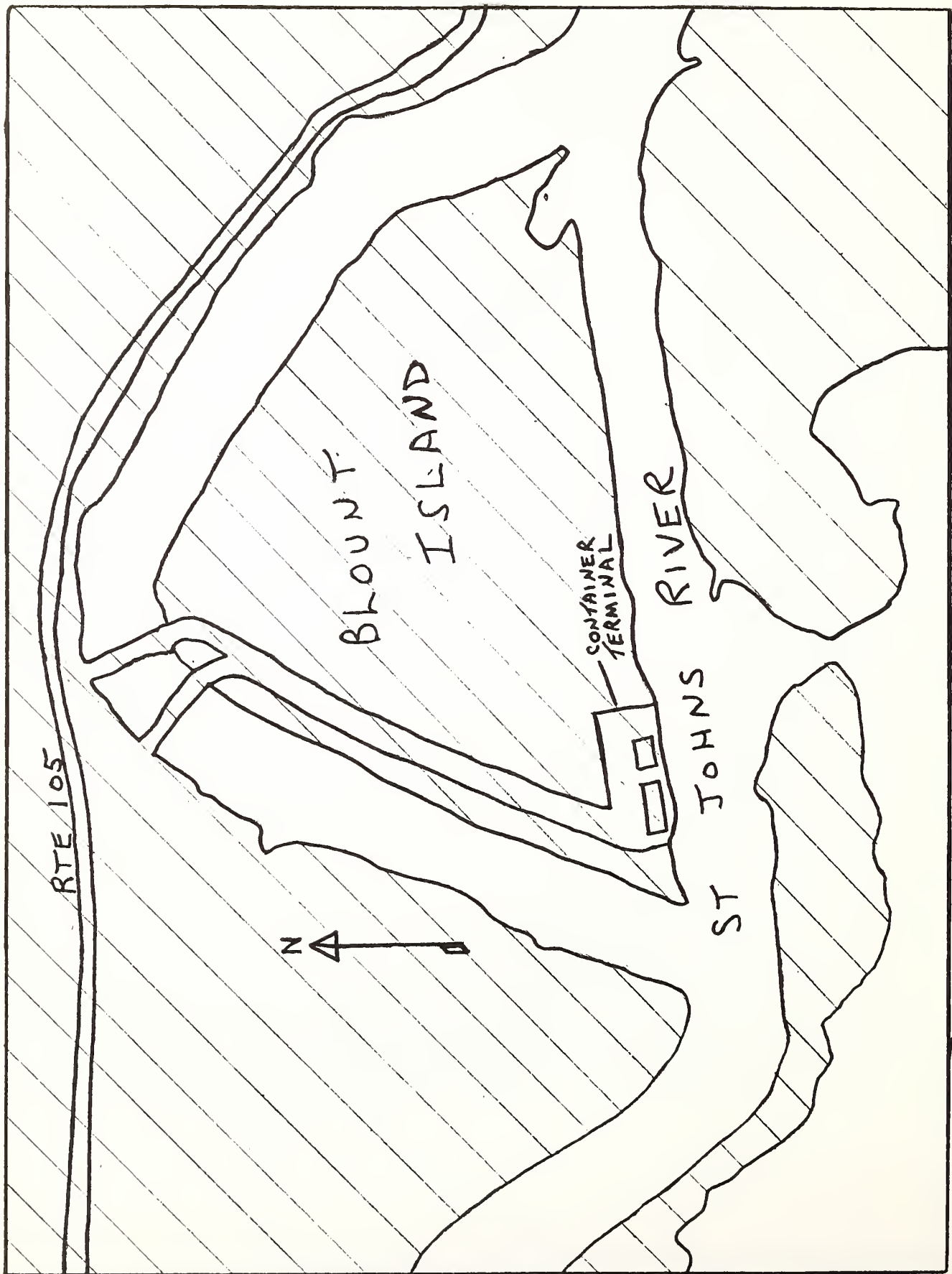
One main gate serves the facility and a truck scale is available for the weighing of marine containers. Sixty acres of open storage exists, some of which is container storage area. Both stack and mounted storage methods are used, depending on the tenant and the availability of chassis equipment. Container traffic on the terminal now averages 450 units per month.

Other types of cargo handled in great quantities at Talleyrand are automobiles, green coffee, and lumber. Datsun leases 22 acres of open storage area and moves a minimum of 2,500 automobiles per month across the terminal. As far as lumber is concerned, an average of 75 million board feet moves across the terminal annually, received primarily from the West Coast of Canada.

The entire terminal has been undergoing a modernization program over the last few years. The final phase, due for completion in 1976, will add an additional 809 feet of marginal wharf as well as 10 acres of paved storage area.

### Blount Island Terminal

About 17 miles downriver from the heart of Jacksonville lies Blount Island, a 1,600 acre expanse of land in the process of being developed as a major industrial site. Part of the development thus far has been a \$7 million container terminal which was completed in 1972. The terminal has the additional capability of handling general cargo as well as specialty cargoes such as automobiles and paper. Major tenants include Puerto Rico Maritime Shipping Authority, Blue Sea Lines, the Japanese Space Charter Group, Volkswagen, and Italian Line.



Vehicular access to the island and terminal is excellent. State highway 105, which passes directly by the connecting bridge to the island, has a direct interchange with Interstate 95. Seaboard Coast Line operates a rail facility on the island and therefore offers direct terminal service. The other trunk line carriers serving the port can also offer direct rail service, though the Seaboard Coast Line will be either a final or initial carrier in any such movement.

The berthing of vessels is along a 2,600 foot marginal wharf immediately adjacent to the 38 foot channel. The berthing area is backed up by two transit sheds, one 120,000 square feet in area and the other 240,000 square feet. Open storage presently consists of 216 paved acres, an additional 20 acres under construction, and 500 more acres available for development.

Container handling equipment includes an Alliance 45 ton rail mounted container crane as well as a recently completed 100 ton capacity Clyde gantry crane also mounted on rails. The utilization plan for each crane calls for simultaneous container and heavy lift handling capabilities. A third crane, a rail mounted 50 ton Whirly gantry, supplements operations, and there is a tentative plan existing to transfer it to Talleyrand Docks. Two 70,000 pound RAGO-WAGNER container stackers are maintained to mount and ground container units onto and from chassis on the terminal. Fifteen fork lift trucks and two yard hustlers round out the inventory of cargo and container handling equipment. Contract stevedores operating on the terminal provide additional fork lift trucks and hustlers as required by their own contractual obligations.

No formal gate complex presently exists, although a security checkpoint is maintained on the paved road entrance to the terminal. A receiving, delivery, or Customs office is the first stop for all traffic entering the terminal, where further routing then takes place. The terminal operates one truck scale for use by domestic trailers and marine containers as necessary. In excess of 500 marine containers per month presently move across the terminal. For that percentage of this volume which are refrigerated units, 96 parking slots are available with 200 volt electrical connections, with an additional 90 reefer connections under construction.

Approximately 50,000 automobiles are moved by Volkswagen annually via Blount Island, and special berthing facilities are now being developed for this movement. A portable rail "ramp" has also been provided for railroad TOFC traffic.

## 2) LEASED TERMINAL FACILITIES ON PORT AUTHORITY OWNED PROPERTY

### Sea-Land Service Terminal

Sea-Land Service Terminal is part of the total Talleyrand Docks and Terminal complex. The comments regarding terminal location and truck railroad accessibility made in the earlier section on Talleyrand therefore also apply to the Sea-Land facility.

Vessel berthing is along a 1,200 foot marginal wharf in 34 feet of water. The apron is outfitted with rail tracks to accommodate the two rail mounted container cranes, one with 27 1/2 ton capacity and the other slightly larger at 30 tons. The stuffing or stripping of pier container units is done at an 8,000 square foot transit shed. Thirteen acres of paved marshalling yard complete the terminal space requirements for the Sea-Land operation.

The company maintains its own fleets of fork lift trucks and yard comandos for the terminal handling of Less Carload Lot freight and containers. As is company policy, containers are stored using an "all mounted" yard system. Formal in and out gates and processing areas, as well as a truck scale, exist to serve the container traffic which crosses the terminal. The facility has rail connections to all trunk line rail carriers through the services of the Municipal Docks Railway.

### Eighth Street Terminal

Eighth Street Terminal is one of the specialized facilities mentioned in the Marine Terminal Survey introduction, whose operation is discussed for purposes of general information. The terminal is owned and was constructed by the Jacksonville Port Authority. It is under long-term lease to Joyserv Ltd., a subsidiary of the distributors for Toyota throughout the southeastern United States. Approximately 20 percent of all Toyotas which enter the United States pass across this terminal, a volume reaching 60,000 out of 290,000 in 1974.

The facility consists of a 707 foot marginal wharf with 34 feet of water alongside. It is adjacent to the Sea-Land Terminal and therefore has similar rail and vehicular access. A 60,000 square foot transit shed and 13 open paved acres are used for the processing and storage of automobiles. Direct rail access is available to all major trunk line carriers serving the port via the Municipal Docks Railway.



### 3) PRIVATELY OWNED AND OPERATED TERMINALS

#### McGiffin Terminals

Seaboard Coast Line Railroad Company owns McGiffin Terminal, which is operated by McGiffin and Company as a general cargo facility. It is located immediately adjacent to Eighth Street Terminal with identical rail and vehicular access.

A marginal wharf berthing space of 1120 feet is supplemented by a 440 foot finger pier. Adjacent are 33,000 and 39,000 square foot transit sheds which are supplemented by 25,000 square feet of open paved storage area and five acres of open-fenced storage area. Fifty-five fork lift trucks, 13 tow tractors, and mobile crane service which is available on call, complete the terminal's inventory of mechanical handling equipment. Seaboard Coast Line has direct rail service onto the terminal and offers reciprocal switching to other rail carriers.

#### TMT Trailer Ferry Terminal

The TMT Trailer Ferry facility also is owned by the Seaboard Coast Line Railroad and is operated by TMT solely for their roll-on/roll-off barge service to Puerto Rico. Its location is adjacent to McGiffin Terminals and it therefore has identical vehicular and rail access.

The operation consists of trailers being driven onto barges and the barges then being towed to their destination port. Barges are berthed along a 1,000 foot marginal wharf which has a RO/RO ramp for loading. A 10,000 square foot transit shed and 12 acres of open storage area compliment the entire roll-on/roll-off operation. The direct service by Seaboard Coast Line into the terminal offers reciprocal switching availability.

#### Commodores Point Terminal

The Commodores Point Terminal is owned by a corporation of the same name, and is leased to the Strachan Shipping Company for their operation. The facility is the largest privately owned general cargo terminal in Jacksonville and is situated on the final bend in the river before it passes through the downtown area. Its site is slightly up river from TMT Terminal and therefore has similar rail and vehicular access.

The 2,750 foot marginal wharf berthing area consists of four tangents, the longest of which is 1,500 feet. Four large transit sheds totalling 154,800 square feet of storage area parallel the berthing space.

In addition to the general cargo operation, the terminal supports petroleum and cement distribution activities. Twelve bulk liquid storage tanks are presently in use totalling a 221,600 barrel capacity. As far as cement is concerned, six new silos entered into operation in 1974 in addition to an existing four. Combined capacity approximates 40,000 tons.

Seaboard Coast Line maintains direct rail service into the terminal and offers reciprocal switching operations when appropriate.

Gulf and Caribbean Wharf

Gulf and Caribbean Wharf is made up of two tangents of the five just described in the Commodores Point Terminal section. They are leased by Gulf and Caribbean Line who provide a regularly scheduled service between Jacksonville and Nassau.



## RAIL/MARINE INTERCHANGE ANALYSIS

A container rail/marine interchange analysis must take the following factors into consideration:

- 1) Nature of interchange
- 2) Interchange procedures
- 3) Drayage distance, time and cost factors

Other related factors of course are discussed if they are consistent with the purpose of the report and analysis:

The chart presented earlier in the report showing the relative locations of rail and marine terminals within the port area should be used as a reference for the analysis.

### NATURE OF TRANSFER

Of all the marine terminals discussed in the survey, three are active as far as container operations are concerned.

- 1) Talleyrand Docks and Terminals
- 2) Blount Island Terminal
- 3) Sea-Land Service Terminal

Only these three therefore will be included in the analysis of the marine container interchange.

Blount Island is the only terminal of the three which has direct rail/marine container transfer, and in turn, this service is only offered by one of the three major trunk line railroads serving the port. Seaboard Coast Line, through use of its direct trackage to Blount Island, routinely offers and accomplishes this rail transfer operation. Southern Railway and Florida East Coast Railway, on the other hand, do not have direct trackage, but do have the option of using either Seaboard Coast Line's trackage or local drayage to complete freight transfer obligations. Their choice to this point has been drayage both for reasons of economic and operational expediency.

It is not so much the direct comparison of rail switching charges versus drayage charges which makes drayage more attractive. It is rather the loss of expensive rail equipment for several days to another rail carrier for the transfer operation. The loss of rail equipment from the system affects the equipment balance and operational efficiency of the trunk line carrier, and his preference therefore is to retain such equipment within his own system.

Talleyrand Docks and Terminals and Sea-Land Service Terminal are located adjacent to one another in what can be called the Municipal Docks area. The transfer of marine containers between remotely situated rail terminals and these two container handling facilities is accomplished exclusively by drayage. Neither marine terminal has been classified as a "ramp location" by any railroad, nor is trailer on flatcar or container on flatcar service even offered to these points by any trunk line carrier at this time.

#### INTERCHANGE PROCEDURES

Direct marine terminal container transfer procedures, as performed by Seaboard Coast Line Railroad at Blount Island, are relatively simple. The railroad acts as the shipper's agent for the physical exchange, the unit's inspection, and the documentation involved. The contract stevedoring company usually acts in the steamship operator's behalf as far as receipt of the unit is concerned.

With regard to drayage transfer, contract drayman acquired by either the railroad or a shipper dispatch a tractor to a rail terminal or marine terminal to pick up a marine container. The haul is then made to the destination terminal, where the unit is turned over to the oncarrier. The paperwork process on either end of the haul is somewhat standard, but can be a source of delay if all necessary documentation is not in order.

#### DRAYAGE DISTANCE TIME, AND COST FACTORS

The following table indicates approximate "over the road" distances between the four remote rail terminals and the three marine terminals which handle marine containers.

	<u>Seaboard Coast Lines</u>		<u>Southern</u>	<u>Florida East</u>
	<u>(Muncrief Yd.)</u>	<u>(W. Jax. Yd.)</u>	<u>Railway</u>	<u>Coast Railway</u>
			<u>(Simpson Yd.)</u>	<u>(Bowden Yd.)</u>
Blount Island	14.7 miles	12.8 miles	19.2 miles	18.4 miles
Talleyrand	5.6 miles	4.8 miles	13.4 miles	10.2 miles
Sea-Land Service	5.6 miles	4.8 miles	13.4 miles	10.2 miles

Transit times between rail and marine terminals do not appear to be a major consideration in the formulation of drayage rates. Hauls to Blount Island naturally consume more time than those to the Municipal Docks area, purely because of the relative distances involved. Maximum running time between any particular pair of terminals however, even under adverse weather or traffic conditions, would be approximately 40 minutes. Representative running times do not include documentation processing delays caused by improper or incomplete paperwork.

Drayage rate formulation within the commercial zone of Jacksonville is not regulated by any city, state, or federal regulatory agency. As a result, rates vary a great deal, depending on distance, traffic volume, and whether moves are one-way or round trip. High volume container operators can often maintain somewhat balanced flows of export and import traffic. Higher volumes and balanced movements allow draymen greater "power" utilization and more operating efficiency, and such can and should be reflected by lower rates.

One-way transfer rates run from a minimum of \$10 for hauls to the Municipal Docks area to about \$25 for moves to Blount Island Terminal. As discussed, traffic volume and one-way/round trip consideration play the most important role in rate formulation.

## CONCLUSION

As has been the norm for all major South Atlantic ports, Jacksonville has designed and implemented a very forward looking and ambitious port development plan. The era of containerization has been amply recognized and embraced by this plan, with the enviable result that three modern and efficient container terminals now exist in the port.

The dramatic growth of container traffic through Jacksonville over the past few years has not kept pace with container handling capability growth experienced as a result of port development plan implementation. Great excess container handling capability therefore exists and probably will remain in the foreseeable future. The present container volume/container handling capability ratio is so favorable in Jacksonville, that concern over transfer and interchange delays for export and import marine containers is negligible. Occasional normal peaks and valleys occur, but are of no consequence in container rail/marine interface.

The ongoing master port development plan includes additional physical terminal improvements at both Talleyrand and Blount Island. An increased level of terminal container handling efficiency can therefore be anticipated in the future. Hopefully, it will also include further refinement of equipment processing and documentation procedures.

As discussed, the direct interface of marine containers between the railroads and the steamship operators does exist at Blount Island for the Seaboard Coast Line Railroad. It accounts for a relatively small percentage of the port's total container traffic, but the system does warrant considered evaluation for further implementation on a portwide basis. Transfer factors such as transit times, equipment handling methods, rates, and vehicular congestion might be favorably affected in many instances.

The growth and development of the port of Jacksonville in recent years has been highly impressive and is most complimentary to the port development plan devised and implemented by the Jacksonville Port Authority. The successful completion of this long range plan, supplemented by the continued forward looking attitude of the port authority, will insure the status of Jacksonville as the largest port in the South Atlantic.

JACKSONVILLE

U.S.-FLAG LINER CARRIER

OFFICE/AGENT DIRECTORY

Farrell Lines, Inc.  
Agent:  
Southeastern Maritime Co.  
2701 Talleyrand Ave.  
Jacksonville, Fla. 32201

Lykes Bros. Steamship Co.  
Agent:  
Strachan Shipping Co.  
931 Florida National Bank Bldg.  
Jacksonville, Fla. 32206

Moore-McCormack Lines, Inc.  
Agent:  
Strachan Shipping Co.  
931 Florida National Bank Bldg.  
Jacksonville, Fla. 32206

Prudential Line  
Agent:  
McGiffin & Co.  
1510 Talleyrand Ave.  
Jacksonville, Fla. 32201

Sea-Land Service, Inc.  
2701 Talleyrand Ave.  
Jacksonville, Fla. 32206

United States Lines, Inc.  
Agent:  
Carolina Shipping  
P.O. Box 52358  
Jacksonville, Fla. 32201







PENN STATE UNIVERSITY LIBRARIES



A000071265056